

OPPORTUNITY STRUCTURE AND INDUSTRIALISATION
OF
BACKWARD AREAS IN UTTAR PRADESH

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Introduction

Removal of regional inequalities and the industrial development of backward areas started receiving special attention in India since the beginning of the Third Five Year Plan. The latter got much emphasised because of the growing demand for employment resulting from an incessant rising trend of labour force and bleak chances of absorption of additional labour in agriculture¹ as well as organised industrial sector.² Realising the remote possibility of automatic occurrence of induced industrialisation in backward areas, a programme for industrialisation was, therefore, started with major emphasis on creating conditions of industrial development and for spatial diversification of industries.³ For this purpose, the measures which were taken up during the first three Five Year Plans comprised mainly the development of infrastructure (i.e., roads, railway, telecommunication, electricity, industrial estates, etc.), development of small scale industries, industrial licensing policy and location of central projects in backward areas.

The underlying assumption behind these measures was to help in removing the two major obstacles to industrialisation. The first, on the supply side, creation of a minimum quantum of threshold required in terms of social overhead capital would lead to spontaneous investments in the private sector. Second, on the demand side, additional employment and income generated due to the social overhead activities would bring about an increase in the effective

demand. The former rests on multiplier mechanism whereby additional investment in social overhead capital activities increases income and effective demand, whereas the latter concerns with the acceleration principle whereby increased effective demand will feed back and induce additional spontaneous directly productive investment.⁴

It was, however, realised during the Fourth Plan that although the above mentioned measures had undoubtedly led to some favourable impact on dispersal of industries, induced industrialisation could not be achieved in the absence of post natal measures consisting of mainly fiscal and financial incentives. A more vigorous and coordinated action at different levels was, therefore, considered imperative to off-set the high cost and low return of investment and promote dispersal of industries to backward areas. Accordingly, two Working Groups were set up by the Planning Commission, one to lay down the criteria for identifying backward districts and the other to deal with incentives for starting industries in backward areas. / Following the recommendations of these two Working Groups, quite a large number of schemes were introduced by the Central and State governments during the seventies for attracting industries to identified backward areas. Important among the central schemes are investment subsidy, concessional finance, transport subsidy, income tax rebate and interest subsidy while those initiated by the State Government consist of exemption from electricity duty, sales tax concessions, exemption from octroi duty, besides promotional schemes like industrial complexes.

The above mentioned measures can broadly be classified into three categories : first, provision of infrastructural facilities including industrial estates and industrial complexes; second, location of large scale public sector industries in backward areas; and third, provision of various kinds of concessions and incentives. All these measures lead to the improvement of what we may call the opportunity structure which is expected to play a crucial role in industrial and overall development of the backward areas. It is now felt that opportunity structure acts as a centripetal force to attract entrepreneurs for setting up industrial units. The shortage of entrepreneurial and managerial talents in backward areas is more often due to lack of opportunity structure than due to lack of achievement motivation. It is experienced that where this opportunity structure is improved, the probability of entrepreneurial success is greater.⁵ The strong opportunity structure in Maharashtra has attracted a class of new entrepreneurs with rural background and orientation to take up to industry in preference to other occupations and has also motivated others to acquire skills needed by industry around.⁶ On the other hand, with a weak opportunity structure in Bihar, neither entrepreneurs are attracted from outside nor are developed from within.⁷

In case of Uttar Pradesh also we find that some of the districts like Kanpur, Agra, Meerut, Gaziabad, Lucknow, Bareilly, Allahabad and Varanasi which have better infrastructural facilities, experience relatively less shortage of entrepreneurs. Even some of the backward districts which are deficient in infrastructure have also been benefited to certain extent because of being located in the

neighbourhood of industrially advanced districts. But the above mentioned measures have not proved much effective in attracting entrepreneurs to set up industrial units in backward districts because of their much more disadvantageous locations.⁸ As a result, the industrial activity is still concentrated in relatively developed states, and within the developed and backward states in and around the industrially advanced districts.

Uttar Pradesh is one of the industrially backward states of India. A variety of measures - promotional as well as protective - were taken up during the period of Fourth and Fifth Plans for industrialisation of backward districts through improvement of opportunity structure. But the overall performance of industrial sector in this state still does not show any marked improvement. The contribution of secondary sector to the state domestic product has increased from 11 per cent to only 16 per cent during the previous two decades.⁹ The State also lags behind its counterparts. The percentage contribution of industrial sector to total net domestic product at the national level during 1975-76 was 15.70 as against the corresponding percentage of 9.7 for Uttar Pradesh. These percentages in case of other states were : 10.86 (Punjab), 24.18 (Maharashtra), 15.51 (Madhya Pradesh), 19.10 (Gujarat), 13.22 (Bihar) and 16.48 (Andhra Pradesh). This prompts us to further study and analyse as to what extent the various measures taken so far have proved effective in improving the opportunity structure and thereby augmenting the level of industrialisation in backward districts of Uttar Pradesh.

2. Objective and Methodology

The present paper, therefore, attempts to assess and analyse the district-wise level of opportunity structure in U.P.; evaluate its effectiveness in terms of achieved growth rates of industrial output and employment; and suggest measures for a speedier process of industrialisation in backward districts. More specifically, the major issues requiring special focus in the present context would be as follows :

1. To what extent have various measures been followed up in actual practice for bringing about an improvement in opportunity structure of backward districts?
2. Is there any relationship between the opportunity structure and the level of industrial development?
3. If yes in case of issue number 2, how far has industrialisation in backward areas been speeded up by the availability of the present opportunity structure?

Generally speaking, the opportunity structure may be defined as a skillfully composed 'package of measures' taken by the Government from time to time for creating conditions suitable to industrialisation. This 'package of measures' can broadly be classified into promotional and protective categories. The former primarily consist of infrastructural facilities like roads, railway, power industrial estates and industrial complexes; the latter mainly concern with the provisions of various kinds of fiscal and financial incentives. Since the data for protective measures are not readily available, the efforts have been made here to explain the opportunity structure through promotional measures only. These comprise precisely the number of industrial estates (X_1), number of industrial complexes (X_2), number of public sector industries (X_3), percentage of villages electrified to total inhabited villages (X_4), percentage of villages situated at less than one km. from

pucca roads to total number of villages (X_5) and the number of bank offices per lakh of population (X_6). The data for the first three measures refer to the year 1981 and those of the remaining ones relate to 1979.

The contributions of these selected measures (henceforth called variables) to opportunity structure differ according to the degree of their importance and effectiveness. For the sake of illustration, the industrial estates providing facilities of factory accommodations/plots, power, communications, banks, post offices, etc., undoubtedly contribute much more to opportunity structure than the bank offices extending only the facilities of credit advancement. In order, therefore, to work out a composite index showing the overall level of development of the opportunity structure for each district, the weights of the selected variables have been determined on the basis of their functional relationships with a performance indicator. Moreover, since a composite index in the present case is likely to become sensitive to the differences in origin and scale of measurement, the functional relationships have been estimated after standardising the selected variables. For determining the weights of the selected variables, the district-wise per capita gross value of industrial produce, 1976-77 (Y) has been treated as a function of the selected variables (X_1, X_2, \dots, X_6). The coefficients, thus arrived at by estimating the multiple regression model as described below have been subsequently used as weights for respective variables,

$$Y = 0.1383 + 0.4201 X_1 + 0.1561 X_2 + 0.1359 X_3 + 0.0084 X_4 + 0.0095 X_5 + 0.0424 X_6$$

$$t = (X_1 = 3.58821) \quad (X_2 = 1.39250) \quad (X_3 = 2.18265) \quad (X_4 = 1.10484)$$

$$(X_5 = 0.68920) \quad (X_6 = 0.73737)$$

$$R^2 = 0.57302$$

$$D.F. = 50$$

The district-wise composite indices from the selected variables have been obtained by their weighted sum, as :

$$I = X_1 W_1 + X_2 W_2 + X_3 W_3 + X_4 W_4 + X_5 W_5 + X_6 W_6, \text{ where,}$$

I = Composite index;

$X_1, X_2 \dots X_6$ = actual values of the selected variables; and

$W_1, W_2 \dots W_6$ = coefficients of the corresponding variables used as weights.

3. Assessment and Analysis of District-wise Opportunity Structure

In the latter part of sixties the Planning Commission divided the whole of Uttar Pradesh into 39 backward and 17 non-backward districts on the basis of their levels of industrial development.

Since then, a variety of measures, as stated earlier, were taken up on priority basis for bringing about a significant improvement in opportunity structure of various districts particularly the backward ones. Some incentive schemes like capital subsidy and transport subsidy, besides establishing industrial complexes were also launched in the beginning of seventies to attract entrepreneurs for setting up industrial units in backward districts. To what extent implementation of these measures has proved to be effective in improving the opportunity structure of various districts is one of the major issues which needs to be analysed here in greater detail.

On the basis of the index of opportunity structure (i.e. the composite score of the selected variables), all the 56 districts of the state have been classified into four categories as follows :

Table 1 : Classification of Districts by the Level of Opportunity Structure (1979-80)

Sl. No.	Level of Opportunity Structure	Districts Declared as Industrially	
		Backward	Non-Backward
1.	Low (Less than 1.25)	Badaun, Shahjahanpur, Hardoi, Bahraich, Gonda, Pratapgarh, Hamirpur, Lalitpur, Pithoragarh, Garhwal, Chamoli, Tehri Garhwal, Uttar Kashi, Mainpuri, Fatehpur, Ballia, Ghazipur, Sultanpur, Jaunpur, Banda, Jalaun, Almora (22)	NIL
2.	Medium - 1 (1.25 \angle 1.50)	Etawah, Pilibhit, Sitapur, Basti (4)	Gorakhpur, Mirzapur (2)
3.	Medium - 2 (1.50 \angle 2.00)	Bulandshahr, Etah, Farrukhabad, Mathura, Rampur, Barabanki, Rae Bareilly, Unnao, Deoria, Faizabad, Jhansi, Azamgarh (12)	Bareilly, Muzaffarnagar, Lakhimpur-Kheri, Varanasi (4)
4.	High (2.00 and above)	Moradabad (1)	Agra, Aligarh, Bijnor, Meerut, Gazia- bad, Saharanpur, Kanpur, Lucknow, Allahabad, Dehradun, Nainital (11)
Total		39	17

Assuming that all the industrially backward districts had low level of opportunity structure in 1968-69, we find that, in spite of the strategic efforts made in the seventies for improving their oppor-

tunity structure through various measures, out of the 39 backward districts, as many as 22 are still having low level of opportunity structure (i.e., less than 1.25). However, as a result of these measures, some definite improvements in levels of opportunity structure are perceptible in rest of the 17 backward districts. Out of these, four districts (i.e. Etawah, Pilibhit, Sitapur and Basti) have attained the level of medium - 1 (i.e., 1.25 - 1.50) in opportunity structure, whereas those achieving the levels of medium - 2 (1.50 - 2.00) and high (i.e., 2.00 and above) are twelve (i.e., Bulandshahr, Etah, Farrukhabad, Mathura, Rampur, Barabanki, Rae Bareilly, Unnao, Deoria, Faizabad, Jhansi and Azamgarh) and one (i.e., Moradabad) respectively. On the other hand, out of the 17 non-backward districts, eleven (i.e., Agra, Aligarh, Bijnor, Meerut, Gaziabad, Saharanpur, Kanpur, Lucknow, Allahabad, Dehradun and Nainital) have attained the high level of opportunity structure (i.e., 2.00 and above), four (i.e., Bareilly, Muzaffarnagar, Lakhimpur-Kheri and Varanasi) have achieved the level of medium - 2 (i.e., 1.50 - 2.00) and the remaining two (i.e., Gorakhpur and Mirzapur) fall in the category of medium - 1 (i.e., 1.25 - 1.50).

The above factual information clearly indicates that as a result of these measures there has been a definite improvement in opportunity structure of some of the backward districts. Secondly, relatively higher levels of opportunity structure in most of the non-backward districts indicate that implementation of these measures has been much more in favour of them only. This seems to be true also because the proportions of industrial estates, industrial complexes, public sector large/medium scale industries,

other infrastructure and credit facilities are found to be much higher in non-backward districts as compared to backward ones. As shown in Table 2, on an average there are two industrial estates in each of the non-backward districts as against only one in backward districts.

Table 2 : Number of Industrial Estates and Industrial Complexes in Backward and Non-Backward Districts of Uttar Pradesh (1981)

Particulars	Number of			
	Industrial Estates		Industrial Complexes	
	Total	Per District	Total	Per District
Backward districts	39	1.00	18	0.45
Non-backward districts	31	1.80	21	1.24
Aggregate : U.P.	70	1.25	39	0.70

Source : Directorate of Industries, Kanpur

On the other hand, each of the non-backward districts is having at least one industrial complex but its availability in backward districts is hardly one against each pair of such districts. Moreover, according to Table 3, because of the relatively larger number of industrial estates in non-backward districts, the numbers of sheds and plots available in these estates per district are also respectively four and two times of what we find in case of backward districts.

Table 3 : Availability of Sheds and Plots in Industrial Estates of Backward and Non-Backward Districts (1981)

Particulars	Availability of			
	Sheds		Plots	
	Total	Per District	Total	Per District
Backward districts	363	9.31	1306	33.49
Non-Backward districts	619	36.41	1435	84.41
Aggregate : U.P.	982	17.54	2741	48.95

Source : Directorate of Industries, Kanpur

According to Table 4, on an average, there are three public sector large/medium scale industries per district in non-backward areas, whereas the corresponding average of such units per district for backward areas hardly comes to one only.

Table 4 : Number of Public Sector Large and Medium Scale Industries in Backward and Non-Backward Districts of Uttar Pradesh (1981)

Sector	(Number)					
	Backward Districts		Non-Backward Districts		Combined for U.P.	
	Total	District per Unit	Total	District per Unit	Total	District per Unit
Central	2	19.50	19	0.89	21	2.67
State	9	4.33	11	1.55	20	2.80
Joint	6	6.50	9	1.89	15	3.73
Cooperative	11	3.55	12	1.42	23	2.43
Aggregate	28	1.39	51	0.33	79	0.71

Source : Directorate of Industries, Kanpur

Two-third of the total such units of the State are found in 17 non-backward districts and only one-third have gone into the 39

backward districts. There are as many as 19 central sector units in all the 17 non-backward districts, whereas the number of such units in whole of the 39 backward districts is two only. All this has led to proportionately higher order of investment and employment in public sector large and medium scale industries of non-backward districts. An investment through such units in non-backward areas is as high as Rs.36.69 crores per district as against the corresponding investment of only Rs.4.10 crores per district in backward areas. Moreover, the employment generated through such industries in case of the former works out to 4354 persons per district as against the corresponding figure of only 800 persons per district in case of the latter.¹⁰

Also the non-backward districts are better served with infrastructure of roads, power and banking institutions. On an average, the percentage of villages situated at less than one kilometer from pucca roads in each of these districts is found to be 28.06 as against 19.84 per cent in backward districts. Moreover, the percentage of villages electrified to total number of villages is also higher (45.43 per cent) in non-backward districts as compared to 33.01 per cent in backward districts. Besides, the number of bank offices per lakh of population in the former is about five per district as against the three only in the latter.

The above discussion clearly suggests that the measures which were taken up with a view to creating conditions favourable to industrial development through improvement in opportunity structure have not been much in favour of backward districts and these facilities are still concentrated mainly in the industrially

non-backward districts. Thus, the efforts which were aimed at to be made in the direction of structural transformation through various measures/instruments of strategy and policy seem to have not featured adequately for the purposes of industrialisation in backward districts.¹¹

4. Impact of Opportunity Structure on Industrial Development of Backward and Non-Backward Districts

The inter-district differentials in opportunity structure are likely to produce some significant variations in levels of industrial development in terms of growth rates of both output and employment between the backward and non-backward districts. But before analysing these variations in the present case, it is considered worthwhile to see the type of relationship that exists between the level of opportunity structure and the industrial development. For this purpose, the composite scores of different districts as worked out with the help of the selected variables are taken as a measure to opportunity structure and the level of industrial development is represented by the district-wise per capita gross value of industrial output. Correlating these variables, a coefficient of 0.74 emerges indicating a direct and positive relationship between the two.

Regarding the impact of opportunity structure on industrial development, it may be mentioned at the outset that the growth rates of industrial output and employment would be analysed in backward and non-backward districts separately for the periods of Sixties and Seventies. Since the major emphasis on improvement in opportunity structure has been laid during the current decade only, it is expected that growth rates of output and employment

would be higher in both types of districts during Seventies as compared to Sixties. Moreover, the data which have been used here for the purposes of present analysis relate to only those large and small scale industrial units which are registered under the Indian Factories Act.

A. Growth Rates of Industrial Output

The growth rates of industrial output as worked out for backward and non-backward districts of Uttar Pradesh separately for the periods of 1960's and 1970's are given below :

Table 5 : Growth Rates of Industrial Output in Backward and Non-Backward Districts

Districts	(Percentage)	
	Growth Rates of Industrial Output in	
	1970 over the base year 1960	1979 over the base year 1970
Backward	1.2	4.1
Non-Backward	4.3	6.0
Combined for U.P.	3.6	5.6

Source : Directorate of Industries, Kanpur

It would be evident from the above table that during 1960's the growth rate of industrial output in backward districts was only 1.2 per cent as compared to 4.3 per cent in non-backward districts and 3.6 per cent in whole of the State. But during 1970's this growth rate in backward districts appreciably increased to 4.1 per cent and the corresponding percentages for non-backward districts and the whole State also increased to 6.0 and 5.6 respectively. It is further observed that the rate of increase in growth rate of industrial output in backward districts during 1970's over 1960's was much higher than what was noticed in case

of non-backward districts. This may be because of low base of industrial output and some improvement in opportunity structure of certain backward districts. However, as a result of this, the gap in growth rates of industrial output between the two types of districts, which was comparatively larger during 1960's, got abridged to a considerable extent during 1970's. It seems that improvements in opportunity structure of 17 out of 39 backward districts brought about by implementation of various measures during 1970's have, inter-alia been able to exercise an effective role in accelerating the pace of growth rates of industrial output in backward districts and also reducing its gap between the backward and non-backward districts. But availability of strong opportunity structure and concentration of public sector large and medium scale industries in non-backward districts have still continued to favour them with higher growth rates of industrial output.

B. Growth Rates of Industrial Employment

Turning to the employment aspect, we find that backward districts have shown comparatively better performance during the periods of both 1960's and 1970's. According to Table 6, the employment in large and small scale industries registered under the Factories Act showed a slightly higher growth rate (1.9 per cent) in backward as compared to that of non-backward districts (1.6 per cent) during 1960's.

Table 6 : Growth Rates of Industrial Employment in
Backward and Non-Backward Districts of U.P.

Districts	(Percentage)	
	Growth Rates of Employment in	
	1970 over the base year 1960	1979 over the base year 1970
Backward	1.9	3.5
Non-Backward	1.6	2.2
Combined for U.P.	1.7	2.7

Source : Directorate of Industries, Kanpur

But the corresponding growth rate during 1970's was appreciably higher (3.5 per cent) in backward districts than 2.2 per cent in non-backward districts. This has also led to an increase in proportionate share of employment in backward districts to the State level during these years.¹² Here again, it seems that improvements in opportunity structure of seventeen backward districts as stated earlier have had a direct bearing on employment generation in backward districts. Besides, the differences in composition of industrial units and the use of technology are the other factors responsible for the higher growth rates of employment in backward districts. The proportion of large and medium scale industries to total units in backward districts is relatively small and majority of the units comprise cottage and village and small scale industries using mostly the labour intensive technology. On the other hand, a relatively higher proportion of large and medium scale industries in non-backward districts has led, in majority of the cases, to the use of capital intensive technology which is less rewarding from the view point of employment generation.

It transpires from the foregoing analysis that improvement in opportunity structure resulting from implementation of various measures during Seventies has undoubtedly brought about some favourable impact on industrialisation of backward districts. However, the backward districts still lag far behind the non-backward ones. The percentage contribution of industrial sector to the total net domestic output pooled together for all the 39 backward districts in 1978-79 was 7.86 only, whereas the corresponding percentage for the remaining 17 non-backward districts was as high as 33.11. Moreover, the contribution of backward districts to the total income of industrial sector at the state level was 24.74 only, as against the corresponding contribution of 75.26 per cent by the non-backward districts. This shows that there is still marked difference in levels of industrialisation between the backward and non-backward districts for which the difference in levels of opportunity structure seems to be considerably responsible.

5. Measures for Speedy Industrialisation

Socio-economic improvement of rural poor through reconciliation between growth and equity, and reduction of poverty and unemployment are likely to be the two major policy priorities in India of Eighties. Industrialisation has to play a pivotal role in this gigantic and paramount task, firstly, by increasing the supply of manufactured goods generally consumed by the rural people and secondly by multiplying income and employment opportunities for them.¹³ Since opportunity structure plays a crucial role in industrial development, planning and implementation of a pre-

industrialisation programme' on scientific lines, besides making provisions of post natal measures, will be necessary for achieving the objective of true industrialisation in backward districts. Therefore, certain policy measures which seem to occupy an important place in any strategy for speedy industrialisation of backward districts are suggested below :

1. As stated earlier, there is a direct relationship between the opportunity structure and the level of industrialisation and the former contributes significantly to the latter. However, in spite of the clear-cut directives of the Government for enforcement of various measures to improve opportunity structure of backward districts, its benefits have largely gone in favour of non-backward districts. With the result, the backward districts still suffer from insufficient size of investment in social overhead activities, resulting in low levels of opportunity structure. Owing to a deficient opportunity structure, the overall economic structure of backward districts also remained somewhat stagnant at low level equilibrium, besides making the process of diversification slow and vacillating. There could hardly be any appreciable progress in autonomous investment in industrial sector of backward districts. This has been one of the reasons for adverse credit deposit ratio of the banking sector in the state, giving some indications regarding the low level of absorptive capacity of the State economy. 5116

Thus, the availability of a critical minimum level of opportunity structure as observed in case of non-backward districts, seems to be necessary precondition for industrialisation of backward

districts. For this purpose, it would be essential to carry out a pre-industrialisation programme in a comprehensive manner simultaneously in all the backward districts with a major emphasis on ensuring the availability of a desired number of industrial estates, industrial complexes and public sector large and medium scale industries, besides adequacy of infrastructural facilities like roads, power and banking institutions. This would involve a huge amount of investment for developing the social overhead capital. And in such case, proceeding with this type of investment until it reaches the minimum quantum of threshold required, would obviously be sensible. Before implementing this programme, it would be necessary to identify the existing gaps in availability of the various constituents of the opportunity structure in backward districts and chalk out a well-knit action plan for bridging them in future. This would help in implementing the suggested measures in the real spirit and preventing the present tendency of allowing the flow of benefits of backward districts to non-backward ones. Moreover, for better efficiency of investment on the social overhead capital, backward districts falling in the categories of 'M-1' and 'M-2' which require relatively less investment for development of social overhead capital to attain the high level of opportunity structure, should be given preferential treatment in the allocations.

2. An effective implementation of a pre-industrialisation programme in backward districts would require a huge amount of investment for developing the social overhead capital. But our past experience tells us that allocation of outlay to industry and mining sector during the period from First to Fifth Plan was only 5 per cent of

the total State plan outlay against the corresponding percentage of 24 for the whole country. Moreover, the central sector investment in this State upto 1977-78 accounted for only 4.2 per cent of the total investment made in the country. These allocations for size of the state like Uttar Pradesh appear to be grossly inadequate when viewed on criteria of population, area, potential and manpower. The inadequate flow of financial resources to industrial sector may be one of the reasons for low level of opportunity structure and slow pace of industrialisation in the State. Therefore, in any strategy of industrial development, provision of adequate financial resources would be essentially required for successful implementation of a pre-industrialisation programme in backward districts. Once the adequate amount of divisible fund is earmarked for industrial sector at the state level its allocation to industrially backward and non-backward districts should be made in accordance with the criteria of population (50 per cent) and area (50 per cent). A similar kind of procedure should be adopted for further split up of this divisible outlay at the district level.

3. A host of schemes for providing various kinds of concessions and incentives to entrepreneurs were started around 1970 with a view to attracting industries to backward districts. No doubt, these measures in conjunction with improved opportunity structure have contributed favourably to the overall performance of industrial sector in backward districts during seventies as compared to sixties. But some of the studies have shown that even among the backward districts, protective measures (i.e., concessions and incentives) have proved to be more effective in those districts, which have relatively higher level of opportunity structure and

vice versa. In its support, we find that among the factors influencing entrepreneur's decision regarding the setting up of industrial units in backward districts, the concessional finance occupies the second place in Moradabad which has high level of opportunity structure, whereas the same factor in case of Bulandshahr having medium - 2 level of opportunity structure ranks fourth only.¹⁵ This means that protective measures will find it difficult to attract industries to remote, inaccessible and highly backward districts which have comparatively lower levels of opportunity structure.

The situations described above suggest that the backward districts, which have at least attained the medium level of opportunity structure, must be provided with various kinds of concessions and incentives for enhancing effectiveness of these measures. And hence the central sector scheme of capital subsidy, which is, at present, applicable to Almora, Basti, Ballia, Faizabad, Jhansi, Rae Bareilly and Lalitpur districts only,¹⁶ should also be extended to Etawah, Pilibhit, Sitapur, Bulandshahr, Etah, Farrukhabad, Mathura, Rampur, Barabanki, Unnao, Deoria, Azamgarh and Moradabad districts. In addition, the provision of interest subsidy, which is, at present, restricted to technically qualified entrepreneurs (graduate/diploma engineers only) should also be extended to new entrepreneurs who have acquired technical know-how and possess ability to set up and run the enterprise successfully.

4. The propulsive industries¹⁷ have also to play a major role in promoting industrialisation of backward districts through providing raw materials, intermediary goods and skills to non-produ-

ctive industries.¹⁸ As stated earlier, backward districts also suffer from inadequacy of public sector large and medium scale industries specially of propulsive nature. It would, therefore, be imperative to make a choice of suitable locations in each of the backward districts for agglomeration of propulsive industries alongwith their types which are required to be established for ensuring proper linkages with non-propulsive industries and also providing maximum possible support to tiny and village industries both existing as well as likely to come up.¹⁹ No single criterion would be adequate to make choice of these locations because of the dominant role of multifarious factors. Therefore, some of the factors which deserve special consideration in this context are suggested as (i) urban area, (ii) focal point to minimise the travel distance and transportation cost, (iii) direct connection with industrial growth centres through rail/road and power, (iv) availability of already existing propulsive industries and (v) availability of key functions/facilities like rail/road, power, industrial estates, industrial complexes, warehousing/cold storage, banking, marketing and technical training centres.

Since the propulsive industries cannot function, in isolation, as generators of spread effects to non-propulsive industries, the former must have direct linkages with industrial units congregated at industrial growth centres²⁰ (called transmission lines). These centres should be potentially strong enough to sustain the load of propulsive industries at the one end and transmit economic energy to entrepreneurs (called reactors) at the other end. The entrepreneurs should possess adequate capacity to translate the

transmitted economic energy into a new economic activity by making an appropriate choice for setting up new industries in backward districts.

Thus, industrial growth centres in backward districts would play the role of transmission lines and entrepreneurs will function as reactors. In the absence of such transmission lines, propulsive industries would not be able to play their role effectively. And their spread effects on development of non-propulsive industries would not be sufficient to boost up the pace of industrialisation. Hence, identification of industrial growth centres would become sine-qua-non. Subsequently, existing infrastructural gaps of these centres will also have to be bridged in order to develop them as potentially strong industrial growth centres.

NOTES and REFERENCES

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2. The annual growth rate of organised sector employment in India during 1971-79 was only 2.1 per cent per annum. Various issues of Employment Review - 1967-79. Directorate General of Employment and Training, Ministry of Labour, New Delhi.
3. It was thought that the efforts to create conditions favourable for industrial development would help in providing the proper framework of social overhead capital. And once such a framework is created, spontaneous private industrial investment will follow and subsequently the objective of true industrialisation will be achieved. See Walter Isard and John H. Cumberland (ed.), Regional Economic Planning : Techniques of Analysis for Less Developed Areas, (O.E.C.D.), Paris, 1961, p.205.
4. Walter Isard and John H. Cumberland, *Ibid.*, pp.205-211.
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7. Menon, K.S.V., Concessional Finance from All India Development Banks : A Statistical Profile and Theoretical Explanation, A paper presented in a seminar on Industrial Development of Backward Areas, Bombay, May 16-17, 1980, p.22.
8. The backward districts may be at disadvantageous locations because of being remote from domestic transportation routes, remote from industrial growth centres and poor in agricultural and other natural resources. These locational disadvantages ultimately result in high cost or low revenue to entrepreneurs.
9. Government of Uttar Pradesh, Draft Sixth Five Year Plan - 1980-85, Review, Department of Planning, Lucknow, Vol.1, p.2.
10. Papola and Tewari, op cit., pp.24-25.
11. Papola, T.S., Economic Constraints on Development, Commerce, Vol.142, No.3649, Bombay, May 23, 1981, pp.7-8.
12. Papola and Tewari, op cit., p.28.
13. Jain, O.P. and Savara, S.K., Industrialisation in the Third World, 1980, New Delhi.
14. Government of Uttar Pradesh : Draft Sixth Five Year Plan - 1980-85, Review, Department of Planning, Lucknow, Vol.1, p.390.

15. Papola and Tewari, op cit., p.75.
16. Entrepreneurship Development Programme, State profile series No.2, Uttar Pradesh, Developments Commissioner, Small Scale Industries, Ministry of Industry, Nirman Bhawan, New Delhi, 1976, p.50.
17. According to Francois Perroux, growth is not spread uniformly among various sectors of an economy, but is concentrated in certain sectors and indeed in particular growth industries, which tend to form clusters and dominate other industries having inter-linkages with them. Since these industries generate spread effects to other industries and assist them in raising their income, employment and technology, they are defined as propulsive or growth industries. See A. Kuklinsky, (ed.) Polarised Development in Regional Policy and Regional Planning, The Hague, Mouton, 1974.
18. For an illustration, take the case of Mau Nath Bhanjan of Azamgarh district where quite a large number of traditional handloom weavers are engaged in manufacturing of handloom clothes. These weavers depended for quite a long time upon the external supplies of yarn mostly from Kanpur or Calcutta. Since Modis have set up a yarn factory there, these handloom weavers have started getting timely supplies of yarn locally and in an adequate quantity. As a result of this propulsive industry, local handloom weavers have started flourishing and the pace of industrialisation has just doubled in the area within a span of 4-5 years. This has also led the traditional weavers to economise their transportation cost of raw material on one hand and get timely supplies of yarn in sufficient quantity at reasonable prices on the other.
19. Tewari, R.T., Strategy Alternatives for Development of Uttar Pradesh, paper presented at the seminar on Alternative Development Strategies, Giri Institute of Development Studies, Lucknow, February, 1981.
20. The industrial growth centres proposed here differ from those fewer number of selected growth centres recommended by the National Committee on Industrial Development of Backward Areas. The former are proposed to be identified in each of the industrially backward districts following the integrated area development approach, whereas the latter are based on the restrictive definition of backward areas emphasising the need to concentrate at them by the Central and State Government agencies for dispersal of industries. There is a feeling that suggestion of the committee does not accord with the political compulsions to meet the claims of different regions in most of the States besides reducing the number of industrially backward districts which are, at present, enjoying the benefits of various kinds of concessions and incentives. See Economic and Political Weekly, Vol.XIV, No.41, Bombay, October 10, 1981, p.1630.

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